Original/Duplicate/Triplicate

CONTRACT CERTIFICATE

(For Other Works)

4th & Part Bill

Division: EE Byatrayanapura Div

Sub division:

Head of Account: AEE Byatrayanapura Div

Bill Received No. .....Date..... Cash Book Voucher No..... dated.....

Scheduled Docted No.

P code :- P3158

Name of Work (as per sanctioned estimate): **Package No.02 (Package consists of 14 works)** — Indent :- 28873

Est: 940 Lakhs

Name of Contractor and Full Address: **Sri.D. Narahari Benaka Developers & Project Pvt.Ltd., #34, 2nd Floor, 2nd Cross, Sampige Road, Malleswaram Bangalore-03**

007-18-0000109

Reference to Work order No. **BBMP/EE/BTP/WO/164/2018-19** dt: 17/11/2018

Certified that the measurement were taken by me on 1/6/21 and recorded of pages: 501441 .....To 501470 of measurement Book No: 5015/19-20 and that the work is satisfactorily executed.

For Benaka Developers And Projects Pvt. Ltd

Contractor :

Officer-In-Charge of work

Certified that the measurements were taken by me on 01/06/2021 are found correct and the work is satisfactorily executed.

NARAHARI .D
Managing Director

Certified that the quantities of materials shown in column 3 of Account II have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of an imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Sub Division Officer

II Memorandum of Payment

1) Total value of work done or supplies made as per account within	Total	1,18,65,396	00
2) Deduct amount to be held in reserve being.....percent Rs.....	Previous upto 3rd part	5,25,39,396	00
3) Deduct amount to be held in Balance	TTB → upto 4th part	1,93,26,000	00
4) Deduct Payments:	It	3,86520	00
a) Amount of previous payment as in the office Cash Book Voucher No.....Dated .....S.D No.....	CGST	1,72,554	00
Amount adjusted towards cash advance recovery of	SGST	1,72,554	00
b) Payments cost store or other materials supplied	Cess	1,93,260	00
Now made recovery of amount creditable to this/other work	CBF	19,326	00
Amount paid on this bill Cheque/Cash	LR	2,91386	00
5) Balance being unpaid value of work done held in reserve	Fine	4400	00
6) Deduct cash advance made on the Office Cash Book Voucher No..... dated..... less adjustments	Ded:	12,40,000	00
7) Net amount due to or from contractor	Cheque	1,80,86,000	00
Unadjusted items			
8) Advance to contractor for materials brought to site (as detailed) with Value of Government materials supplied			

E.E. (BTP. DIV)

For Benaka Developers And Projects Pvt. Ltd

NARAHARI .D
Managing Director

P3158

Contractor's Signature

Received **Rs.**

by cash and by adjustment of Payment as per memorandum.

Witnesses:

1

2

Stamp

For Benaka Developers And Projects Pvt. Ltd

Dated..... Signature of Contractor

NARAHARI .D
Managing Director

Paid by me by cheque No.....dated.....

Cast Rs.....dated.....

Initials of Officer making payment

ಕೆಳಕಂಡ ಕೆ SIP-Infrastructure project Works ರಡಿ ಸಲ್ಲಿ ಮೊಬಲಗು ರೂ. 1,93,26,000/- ಗಳನ್ನು ಪಾಸು ಮಾಡಿದೆ ಇದರಲ್ಲಿ ರೂ. 12,40,000/- ಗಳನ್ನು ಹೊಂದಾಣಿಕೆ ಮಾಡಿಕೊಂಡು ರೂ. 18,08,6000/- ಗಳನ್ನು

NEFT/RTGS ಮಾಡಿಕೊಂಡು ನೀಡಲಾಗಿದೆ

ವಿಷಯ ನಿರ್ವಾಹಕರು

ಎಕ್ಸಿಕ್ಯೂಟಿವ್ ಇಂಜಿನಿಯರ್ ಬ್ಯಾಟರಾಯನಪುರ ವಿಭಾಗ ಬೃ.ಬೆ.ಮ.ಪಾ. ಬೆಂಗಳೂರು 28/10

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು ಬ್ಯಾಟರಾಯನಪುರ ವಿಭಾಗ ಬೃ.ಬೆ.ಮ.ಪಾ. ಬೆಂಗಳೂರು 28/10

BRUHATH BANGALORE MAHANAGARA PALIKE

Bytarayanapura Division

Name of Work (as per sanctioned estimate):Package No.02 (Package consists of 14 works)

Job Code :- 007-18-000109, 007-18-000110, 007-18-000111, 007-18-000112,007-18-000113,007-18-000114, 007-18-000115, 007-18-000116, 007-18-000117, 007-18-000118, 007-18-000119,007-18-000120,007-18-000121, 007-18-000122, 28873

Name of Agency :- Benaka Developers & Project Pvt.Ltd.

Bill No :4th & Part Bill

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)	Cum	**10454.76**	217.12	4881.82 4885.82	1059941.00 1060810.00	1396.13	303128.18	6277.95 6281.95	1363069 1363937.85	
2	KSRRB M200-15.2. Dismantling of existing structures like culverts, Bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceble material and stacking the serviceble material with all lifts complete as per specifications. iii) Dismantling Stone Masonry B. Rubble Stone maonry in cement mortar (P.No.137, I.No.18.27 of PW,P&IWTD SR 2016-17)	Cum	**54.54**	406.89	0.00	0.00	0.00	0.00	0.00	0.00	
3	KSRRB M200-14.2. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. ii) Dismantling brick/Tile work B. In cement mortar. MORTH Specification No. 202 (P.No.137, I.No.18.23 of PW,P&IWTD SR 2016-17)	Cum	**36.00**	401.67	0.00	0.00	0.00	0.00	0.00	0.00	
4	KSRRB M200-12.2. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. i) Lime /Cement Concrete. I. By Manual Means :B. Cement Concrete Grade M-15 & M-20. MORTH Specification No. 202. (P.No.137, I.No.18.18 of PW,P&IWTD SR 2016-17)	Cum	**20.70**	549.11	0.00	0.00	0.00	0.00	0.00	0.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date	
					Qty	Amount	Qty	Amount	Qty	Amount
5	Removing and Resetting of Footpath Slab (P.No.265, I.No.37.56 of PW, P&IWTD SR 2016-17)	Sqm	**3570.00**	141.78	3368.52	477589.00	201.48	28565.83	3570.00	506154.60
6	Removing & Refixing Stone slabs of drains and Pointing in C.M(1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)	Sqm	**10405.60**	86.20	4521.67	389768.00	2677.21	230775.50	7198.88	620543.63
7	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)	Sqm	**9726.92**	712.28	4038.84	2876785.00	2096.28	1493138.32	6135.12	4369923.27
8	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWTD SR 2016-17)	Sqm	**60.00**	883.54	0.00	0.00	0.00	0.00	0.00	0.00
9	KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. specification. No. KBS(P.No.6, I.No.2.15 of PW,P&IWTD S.R 2016-17)	Cum	**81.69**	2442.94	0.00	0.00	0.00	0.00	0.00	0.00
10	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)	Cum	**176.92**	5723.17	67.57	386717.00	9.07	51920.60	76.64	438638.06
11	KSRB 4-6.1: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specifcation No. KBS 4.6.2 (P.No.15, I.No.4.28 of PW, P&IWTD SR 2016-17)	Sqm	**24.00**	262.00	24.00	6288.00	0.00	0.00	24.00	6288.00
12	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surfaces such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No.KBS 4.6.2 (P.No.15, I.No.4.31 of PW,P&IWTD SR 2016-17)	Sqm	**172.80**	332.32	172.80	57425.00	0.00	0.00	172.80	57424.90

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
13	Providing and laying cement concrete using 20mm and downsize granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) for RCC works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, with all lead and lifts etc., complete (exclusive of cpost of steel and fabricaton charges) Ready Mixed Cement Concrete M 20 for Raft foundation, Column, Footing, main and secondary beams. (P.No.18, I.No.4.48 of PW, P&IWTD SR 2016-17)	Cum	**38.40**	6667.96	38.40	256050.00	0.00	0.00	38.40	256049.66	
14	KSRB - 4.9.2: Providing TMT steel reinforcement Fe500 for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. (P.No.17, I.No.4.46.2 of PW, P&IWTD SR 2016-17)	MT	**3.08**	68740.46	1.90	130297.00	0.00	0.00	1.90	130297.12	
15	KSRB 5-11 : Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 5.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 (P.No.12, I.No.5.27.2 of PW,P&IWTD S.R 2016-17)	Sqm	**303.20**	942.52	186.80	176062.74	33.00	31103.16	219.80	207165.90	
16	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 (P.No.143, I.No.5.6 of PW,P&IWTD S.R 2016-17)	Cum	**241.26**	4748.90	66.46	315633.00	6.91	32824.40	73.38	348457.19	
17	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.112, I.No.15.1 of PW, P&IWTD S.R 2016-17)	Sqm	**488.70**	110.02	128.35	14120.85	0.00	0.00	128.35	14120.85	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
18	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and, fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No. 4.6 of PWD SR 2015-16)	Cum	**72.20**	6171.18	27.18	167733.00	7.43	45876.55	34.61	213609.22	
19	Providing and laying/fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick for flooring conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, including cutting, griding the edge to half/full round wherever required, labour, curing complete as per specification. (P.No. 109, I.No. 14.62 of PWD SR 2016-17)	Sqm	**1335.00**	1230.61	1135.94	1397899.00	0.00	0.00	1135.94	1397899.12	
20	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	Sqm	**2499.60**	1859.66	495.03	920587.00	0.00	0.00	495.03	920587.49	
21	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	Sqm	**195.12**	5297.57	165.90	878867.00	17.28	91542.01	183.18	970408.87	
22	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)	Cum	**6408.20**	176.29	5073.24	894361.00	1334.96	235339.99	6408.20	1129700.94	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
23	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305 (P.No.147, I.No.19.60 of PW,P&IWTD S.R 2016-17)	Cum	**1008.00**	342.53	0.00	0.00	0.00	0.00	0.00	0.00	
24	KSRRB M400-6.2: Construction of granular sub-base by providing Close graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with mortar grader on prepared surface and compacting with vibratory roller to achieve the desired density, complete as per specifications. A Plant Mix methad For Grading II Material (P.No.155, I.No.20.4.2 of PW,P&IWTD SR 2016-17)	Cum	**372.97**	1781.83	227.25	404921.00	0.00	0.00	227.25	404920.87	
25	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTD SR 2016-17)	Cum	**5302.07**	1891.85	4001.63	7570484.00	1300.44	2460240.03	5302.07	10030723.78	
26	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTD SR 2016-17)	Sqm	**22350.08**	29.49	17266.65	509194.00	5083.43	149910.28	22350.08	659103.86	
27	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWTD SR 2016-17)	Sqm	**93451.82**	3.40	63747.68	216742.00	14722.37	50056.05	78470.05	266798.16	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
28	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)	Sqm	123762.50	13.61	86327.84	1174922.00	37434.66	509485.74	123762.50	1684407.72	
29	KSRRB M500-16. Providing and laying dense bituminous macadam 50-75mm compacted thickness with 4.5% VG-30 Bitumen using 40/60 TPH capacity H.M.P, using crushed aggregates of grading II, premixed with VG 30 grade bituminous binder and transporting the hot mix to work site, laying with mechanical paver to the required grade level and alignment rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10, complete in all respects complete as per specification MORTH specification No. 507 (P.No.162 I.No. 21.17.6 of PW,P&IWTD S.R 2016-17)	Cum	562.40	7618.42	240.44	1831773.00 1831735.00	321.96	2452827 2452864.12	562.40	4284600.00 4284599.41	
30	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)	Cum	4632.08	8686.84	3321.36	28852155 28852136.00	1176.27	10217982 10218091.00	4497.63	39070137.00 39070226.94	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
31	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) ((P.No.177, I.No.22.6.1 of PW,P&IWTD SR 2016-17)	Cum	**87.65**	6653.22	0.00	0.00	0.00	0.00	0.00	0.00	
32	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(P.No.177, I.No.22.7 of PW, P&IWTD SR 2016-17)	Sqm	**876.50**	102.08	0.00	0.00	0.00	0.00	0.00	0.00	
33	Providing and fixing Pre cast solid concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete (P.No.25, I.No.5.30 of PW,P&IWTD S.R 2016-17)	No.	**1666.00**	355.00	586.00	208030.00	0.00	0.00	586.00	208030.00	
34	Removing and resetting of kerb stones(P.No.185, I.No.37.57 of PW,P&IWTD SR 2016-17)	m	**2970.00**	70.32	1368.70	96247.00	0.00	0.00	1368.70	96246.98	
35	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (P.No.182, I.No. 24.1 of PW,P&IWTD SR 2016-17)	Sqm	**1302.00**	68.05	323.00	21980.00	0.00	0.00	323.00	21980.15	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
36	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)	Sqm	**3470.30**	580.71	756.43	439266-00 439264.00	698.58	405672-00 405669.49	1455.00	844938-00 844933.05	
37	KSRRB M2100-1.1. Earth work in excavation for foundation of structures such as culverts, bridges etc., as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per specifications I. Ordinary soil - A. Manual Means (i) Depth upto 3m MORTH Specification No. 304 including disposal of excavated earth upto a distance of 10km including loading and unloading charges(P.No.209, I.No.27.1 of PW,P&IWTD S.R 2016-17))	Cum	**416.01**	266.26	0.00	**0.00**	0.00	0.00	0.00	0.00	
38	KSRRB M2100-13. Plain / Reinforced Cement Concrete M15 with OPC cement @ 240kgs, with 40mm and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @ 0.56cum in Open Foundation complete as per Drawing and Technical Specifications MORTH Specification No. 1500,1700 & 2100.(P.No.211, I.No.27.24 of PW,P&IWTD S.R 2016-17)	Cum	**46.13**	6784.53	0.00	**0.00**	0.00	0.00	0.00	0.00	
39	Diversion of water course by providing Coffer dams or bunds or islands as may be necessary for piers and abutments foundations, bailing out or pumping water during excavation and until completion etc., complete.(1.50 mtrs depth below LWL.)(P.No.257, I.No.37.41.1 of PW,P&IWTD S.R 2016-17)	Cum	**67.50**	309.70	0.00	**0.00**	0.00	0.00	0.00	0.00	
40	Diversion of water course by providing Coffer dams or bunds or islands as may be necessary for piers and abutments foundations, bailing out or pumping water during excavation and until completion etc., complete.(beyond 1.50 mtrs depth upto & including 3m)(P.No.257, I.No.37.41.2 of PW,P&IWTD S.R 2016-17)	Cum	**67.50**	381.35	0.00	**0.00**	0.00	0.00	0.00	0.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
41	KSRRB M800-43. Installation of a steel portable barricade with horizontal rail 300 mm wide, 2.5 m in length fitted on a 'A' frame made with 45 x 45 x 5 mm angle iron section, 1.5 m in height, horizontal rail painted (2 coats) with yellow and white stripes, 150 mm in width at an angle of 45°, 'A' frame painted with 2 coats of yellow paint, complete as per IRC:SP:55-2001 complete as per specifications.(P.No.186, Item no 24.44 of PW,P&IWTD S.R 2016-17))	Each	10.00	2741.08	0.00	0.00	0.00	0.00	0.00	0.00	
42	KSRRB M2100-20.2. Plain / Reinforced Cement Concrete in Open Foundation with OPC cement design mix M35 @ 390kgs, with 20mm and down size graded granite metal coarse aggregates @0.68cum and fine aggregates @ 0.45cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008. case II : With Batching Plant, Transit Mixer and Concrete Pump MORTH Specification No. 1500,1700 & 2100(P.No.213, I.No.27.37 of PW,P&IWTD S.R 2016-17)	Cum	99.51	7454.78	0.00	0.00	0.00	0.00	0.00	0.00	
43	KSRRB M2200-5.19. Design mix M35 with OPC cement @ 390kgs,with 20mm and down size graded granite metal coarse aggregates @0.68cum and fine aggregates @ 0.45cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 - ii) For height, upto 5m,(P.No.214, I.No.28.7.18 of PW,P&IWTD S.R S.R 2016-17)	Cum	77.20	8397.75	0.00	0.00	0.00	0.00	0.00	0.00	
44	KSRRB M2300-8.1. Furnishing and Placing Reinforced/ Prestressed cement concrete in super-structure as per drawing and Technical Specification complete as per specifications. D. RCC / PSC with OPC cement design mix M35 @ 390kgs, with 20mm and down size graded granite metal coarse aggregates @0.68cum and fine aggregates @ 0.45cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, Case - II : Using Batching Plant, Transit Mixer & Concrete Pump MORTH Specification No. 1500,1600 & 1700-Height upto 5 m(P.No.226 , I.No.29.16.1 of PW,P&IWTD S.R S.R 2016-17)	Cum	94.46	8048.75	0.00	0.00	0.00	0.00	0.00	0.00	
45	KSRRB M2200 -6 Supplying , fitting and placingTMT bar Fe 550 reinforcement in sub-structure complete as per drawing & technical specification complete as per the specification . MORTH Specification No.1600 & 2200(P.No.218 , I.No.28.8.3 of PW,P&IWTD S.R 2016-17)	Tonne	19.90	73266.2	0.00	0.00	0.00	0.00	0.00	0.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
46	KSRRB M2300 -14. supplying , fitting and placing TMT bar Fe 550 reinforcement in super-structure complete as per as per drawing & technical specification complete as per the specification . MORTH Specification No.1600.(P.No.231 , I.No.29.29.3 of PW,P&IWTD S.R 2016-17))	Tonne	**12.28**	74471.49	0.00	**0.00**	0.00	0.00	0.00	0.00	
47	KSSRB M220 - 8. Providing weep holes in Brick masnory / Plain / Reinforced concrete abutment, wing wall / return wall with 100mm dia AC pipe, extending through the full width of the structure with slope of 1V:20H towards drawing foce. Complete as per drawing and Technical specifications complete as per specifications. MORTH Specification No. 2706 & 2200 (P.No.218, I.No.28.10 of PW,P&IWTD S.R 2016-17))	No./ Mtr	**126.00**	194.14	0.00	**0.00**	0.00	0.00	0.00	0.00	
48	KSRRB M2700-4. Providing, fitting and fixing mild steel railing complete as per drawing and Technical Specification complete as per specifications MORTH Specification No. 2703.2, 1900'(P.No.239, I.No.32.4 of PW,P&IWTD S.R 2016-17))	m	**22.70**	3359.33	0.00	**0.00**	0.00	0.00	0.00	0.00	
49	KSRRB M2700-5. Drainage Spouts complete as per drawing and Technical specification complete as per specifications MORTH Specification No. 2705(P.No.239, I.No.32.5 of PW,P&IWTD S.R 2016-17))	No	**20.00**	1900.96	0.00	**0.00**	0.00	0.00	0.00	0.00	
50	KSRRB M2300-16. Providing and laying Cement concrete wearing coat with OPC cement design mix M30 @ 360kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.46cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 including reinforcement complete as per drawing and Technical Specifications complete as per specifications MORTH Specification No. 2702'(P.No.239, I.No.32.8 of PW,P&IWTD S.R 2016-17))	Cum	**11.35**	11877.26	0.00	**0.00**	0.00	0.00	0.00	0.00	
51	KSRRB 2200-9 Filter Media Providing & laying of Filter media With Granular meterails / Stone crushed aggregates satisfying the requirement laid down in clause 2500.4.2.2 of MORTH Specification to a thickness on not less than 600 mm width smaller size towards the soil & bigger size towards wall & provided over the entire surface behind Abutment, Wing wall & return wall to the full height compacted to a firm condition complete as per Drawing & Techincal Specifications. Complete as per specification MORTH Specification No. 710.14of IRC: 78& 2200(P.No.218, I.No.28.13 of PW,P&IWTD 2016-17))	Cum	**114.00**	1497.66	0.00	**0.00**	0.00	0.00	0.00	0.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
52	KSRRB 2200-8.1 Back filling behind Abutment, Wing wall & return wall to the full height compacted to a firm condition complete as per Drawing & Techincal Specifications. Complete as per specification A. Granular Material MORTH Specification No. 710.14of IRC: 78& 2200.With all Leads & Lift etc & as per the direction of the Engineer Incharge of the Work.(P.No.218, I.No.28.11 of PW,P&IWTD S.R 2016-17))	Cum	186.74	605.53	0.00	0.00	0.00	0.00	0.00	0.00	
53	KSRRB M2500-11. Construction of flexible apron 1 m thick comprising of loose stone boulders weighing not less than 40 kg beyond curtain wall complete as per specifications MORTH Specification No. 2507.2(P.No.241, I.No.30.14 of PW,P&IWTD S.R 2016-17))	Cum	274.80	1667.53	0.00	0.00	0.00	0.00	0.00	0.00	
54	KSRRB 2500 - 5.1 Providing & laying , flooring complete as per and technical specifiactions laid over cement concrete bedding complete as per specification. A. Rubble Stone laid in CM 1:3 MORTH Specification No. 2505(P.No.240, Item no 30.7 of PW,P&IWTD S.R 2016-17))	Cum	82.44	5270.69	0.00	0.00	0.00	0.00	0.00	0.00	
55	KSRRB M2500-10.Curtain wall complete as per drawing and Technical Specifications. B. Cement Concrete Grade M-15 MORTH Specification No. 2507.2(P.No.241, Item no 30.13 of PW,P&IWTD S.R 2016-17))	Cum	20.61	6024.14	0.00	0.00	0.00	0.00	0.00	0.00	
56	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction (P.48, I. 9.4) PRED.SR 2012-13	Each BW	2.00	2013.74	2.00	4027.00	0.00	0.00	2.00	4027.48	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
57	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) P. 46 / I. 9.1 PRED SR 2012-13 - 0 to 50m	Rmtr	100.00	327.42	100.00	32742.00	0.00	0.00	100.00	32742.00	
58	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) P. 46 / I. 9.1 PRED SR 2012-13 - 50 to 100m	Rmtr	100.00	428.00	100.00	42800.00	0.00	0.00	100.00	42800.00	
59	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) P. 46 / I. 9.1 PRED SR 2012-13 - 100 to 150m	Rmtr	100.00	476.15	100.00	47615.00	0.00	0.00	100.00	47615.00	
60	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) P. 46 / I. 9.1 PRED SR 2012-13 - 150 to 200m	Rmtr	100.00	502.90	50.00	25145.00	0.00	0.00	50.00	25145.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
61	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) P. 46 / I. 9.1 PRED SR 2012-13 - 200 to 250m	Rmtr	**100.00**	582.08	36.00	20955.00	0.00	0.00	36.00	20955.00 20954.88	
62	Supply of ISI mark 175 mm nominal bore, Plain end steel casing pipe - grade of Steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by baseic open hearth electric or basic oxygen process in random length of 5 to 7 mts both ends threaded confirming tio IS 554/1985, one end fixied with socket confirming to IS 4270:2001 and the other end with screwed pipes ISI Marking weighing 25.10Kg/mtr (Inclusive of all taxes and durties) Prices include Collar-medium duty P. iii, I No. 84 PRED SR 2012-13	Rmtr	**100.00**	1417.75	50.50	71596.00	0.00	0.00	50.50	71596.38	
63	Providing 250mm dia PVC Pipe 6kg/cm SE PRED Approved Rate	Rmtr	**36.00**	807.28	36.00	29062.00	0.00	0.00	36.00	29062.08	
64	Providing and fixing 160mm Borewell Cap P. iii, I No. 85	Rmtr	**2.00**	107.00	2.00	214.00	0.00	0.00	2.00	214.00	
65	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings 12.50 HP 25 stage. ATALANTA< SUGNA< CRI, KIRLOSKAR and other Equivalent Pumps PWD SR 2016-17 P. XXXXII Item No. 24 including of all taxes-12.5 HP 25 Stage	No	**2.00**	64628.00	2.00	129256.00	0.00	0.00	2.00	129256.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
66	Supplying of ISI marked galvanized mild steel tube (continously welded electric resistance welded (ERW) high frequency, induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends as per IS 554/1986 with latest amendments, pipes threaftes at one end and the other end protected asper specification in random lengths of 4 to 7 mtrs Confirming to IS 1239 part I/1990 with amendament 1-5 and with all its latest amendements if any. The pipes supplied should be with BIS mark No 3/08-09 2406/15.10.2008	Rmtr	500.00	401.25	500.00	200625.00	0.00	0.00	500.00	200625.00 12241.00	
67	Heavy Duty Collar 50 mm dia	No	88.00	139.10	88.00	12241.00	0.00	0.00	88.00	12240.80	
68	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 & confirming to GTP of GROUP-A. P. No. 12 / I No. 2.10.4(1) 3C x 6 Sqm mm KPWD Electrical SR 2014-15	Mtr	1020.00	201.91	1000.00	201910.00	0.00	0.00	1000.00	201910.00	
69	Erection of pumpset including aligning and balancing with all necessary erection materials and labour including supply and erection of one pair supporting clamps, one borewell cap. Cable clips with bolts, nuts, valves guages etc., involoved in the job (Necessary GI pipe and specials with be supplied by the board at the site free of cost) (As per rate approved KUWS & DB for year 2008-09	Nos	2.00	3210.00	2.00	6420.00	0.00	0.00	2.00	6420.00	
70	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., P No. 44 / I No. 6.6.6 KPWD Electrical SR 2014-15	Each	2.00	323.14	2.00	646.00	0.00	0.00	2.00	646.28	
71	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A P No. 55/ I No. 7.4.4 4 core 16 Sqmm KPWD Electrical SR 2014-15	Mtr	60.00	150.23	60.00	9014.00	0.00	0.00	60.00	9014.00 9013.80	
72	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct. P No. 61 / I No. 7.8.1 6Sqmm to 16 Sqmm) KPWD Electrical SR 2014-15	Mtr	60.00	11.56	60.00	694.00	0.00	0.00	60.00	694.00 693.60	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
73	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) P No. 61 / I. No. 7.9.3 KPWD Electrical SR 2014-15	Mtr	**50.00**	90.95	50.00	4548.00	0.00	0.00	50.00	4548.00 4547.50	
74	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV P. No. 62 / I No. 7.12.1 KPWD Electrical SR 2014-15 - 40mm dia GI pipe	Mtr	**8.00**	369.15	8.00	2953.00	0.00	0.00	8.00	2953.20	
75	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., P. No. 62 / I.No. 7.13.2 KPWD Electrical SR 2014-15 - 16Sqmm	No	**2.00**	299.60	2.00	599.00	0.00	0.00	2.00	599.20	
76	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia, (P No. 55, I No. 7.1) KPWD Electrical SR 2014-15	No	**2.00**	2917.89	2.00	5836.00	0.00	0.00	2.00	5836.00 5835.78	
77	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.P No. 44 / I No. 6.7.2 KPWD Electrical SR 2014-15 - 32 Amps	No	**12.00**	192.60	12.00	2311.00	0.00	0.00	12.00	2311.20	
78	KSRB 13-7.1-4: Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 Page No. 93 Item No. 13.55 / PWD SR 2016-17	No	**2.00**	1728.78	2.00	3458.00	0.00	0.00	2.00	3458.00 3457.56	
79	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete. P. No. 95 / I. No. 13.81.3 PWD SR 2016-7	No	**2.00**	248.45	2.00	497.00	0.00	0.00	2.00	497 496.90	
80	Supplying and fixing 50mm dia GI X nipple with ISI mark with all lead and lift loading unloading and labour charges etc complete	No	**8.00**	85.60	8.00	685.00	0.00	0.00	8.00	684.80	685
81	Supplying shunt capaitors conforming to IS 2834, 3phase 400/440 volts grade for power factor improvement of rotating machinery, Capacitor in KVAR rating Nos. 2KVAR capacity with all lead and lift =, loading, unloading and labour charges etc complete as per specifications	No	**2.00**	374.50	2.00	749.00	0.00	0.00	2.00	749.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
82	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 5-32Amps TPN P No. 47 / I No.6.16.5 KPWD SR 2014-15	No	**2.00**	1655.29	2.00	3311.00	0.00	0.00	2.00	3310.58 3311.00	
83	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete P.No. 49, I. No. 6.40.2 KPWD Electrical SR 2014-15 - 16SWG	No	**43800.00**	0.35	43800.00	15330.00	0.00	0.00	43800.00	15330.00	
84	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. 12.5HP to 15 HP Star Delta Starter SERDED Rate	No	**2.00**	11770.00	2.00	23540.00	0.00	0.00	2.00	23540.00	
85	Earthwork excavation for pipeline trenches including deporiting or bank up to a lead of 50 mtrs including shiriry and statting danger lighting and using site rails and boming poles at every 100 mtrs wherever necessary as directed in th following strructure manhole. Page No. 01/ Item No.1.2.2 / PRED SR 2012-13 Hard Soil	Cum	**54.00**	201.16	54.00	10863.00	0.00	0.00	54.00	10862.64 10863.00	
86	Providing and instalation at site of works P.V.C.Pipes including cost of pipes and specials and incluidng lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the execavation Etc., Page No.15 item No.3.4.2 b PRED SR 2012-13. - 75 mm dia 6 KSC PVC pipe	Rmtr	**120.00**	167.99	120.00	20159.00	0.00	0.00	120.00	20158.80 20159.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
87	Refilling the basement and pipeline treanches with secleted available earthe for trench excavation including authority condition in layers from thedi including disponsary of the sunplus earth with a heavy 200 mtrs Page No. 3 / Item No. 1.6 / PRED SR 2012-13	Cum	**54.00**	65.27	54.00	3525.00	0.00	0.00	54.00	3524.58	
88	KSRB 13.6.3-6 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 50mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3 P. 92 / I.13.37 PWD SR - 2016-17	Each	**4.00**	2371.29	4.00	9485.00	0.00	0.00	4.00	9485.16	
89	KSRB 2-2.2 : Earth work excavation for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, in Hard soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No, KBS 2.1(a) / 2.3.5, Page No. 5 / Item No. 2.3/ PWD SR 2016-17	Cum	**48.09**	218.41	0.00	0.00	18.91	4130.29	18.91	4130.29	
90	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180 kgs with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. No. 12/ Item No. 4.3/ PWD SR 2016-17	Cum	**13.44**	5624.31	0.00	0.00	3.10	17435.36	3.10	17435.36	
91	KSRB 5.2.3 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 Page No. 23 / Item No. 5.6 / PWD SR 2016-17	Cum	**11.16**	4838.50	0.00	0.00	7.47	36143.60	7.47	36143.60	
92	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 23 / Item No. 5.9 / PWD SR 2015-16	Cum	**5.02**	5783.78	0.00	0.00	3.31	19144.31	3.31	19144.31	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
93	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications. Specification No. KBS 2.9 (P.6/I.2.10) PWD SR 2016-17	Cum	**48.09**	146.76	0.00	0.00	12.97	1903.58	12.97	1903.58	
94	KSRB 5-11 : Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 5.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4. Page No. 25 / Item No. 5.27 / PWD SR 2016-17	Sqm	**111.04**	1082.80	0.00	0.00	47.89	51855.29	47.89	51855.29	
95	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, No. 13/ Item No. 4.11/ PWD SR 2016-17	Cum	**16.17**	6946.31	0.00	0.00	8.67	60224.51	8.67	60224.51	
96	KSRB 4.2.10 : Providing and laying in position reinforced cement concrete ofmix M20 with OPC cement @ 24kgs, with 12 mm and down size graded granite metal coarse aggregates @ 0.5175 cum and fine aggregates @ 0.345 cum with superplastisiser @ 0.225lts,machine mixed, well compacted for plain chajja of 7.5 cms. average thickness, upto ground floor lever, including cost of all materials, labour, HOM of machinery, curing, complete as per specification. Specification NO. KBS 4.1, 4.6 Page No. 14 / Item No. 4.19 / PWD SR 2016-17	Sqm	**4.05**	526.95	0.00	0.00	0.03	15.81	0.03	15.81	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
97	KSRB 4.9.1: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications.Specification No. KBS 4.6.3 Page No. 17 / Item No. 4.46.2 / PWD SR 2016-17 - FE 500	MT	1.97	80337.31	0.00	0.00	0.74	59450.00 59196.20	0.74	59450.00 59196.20	
98	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 Page No. 15 / Item No. 4.31/ PWD SR 2016-17	Sqm	117.50	338.59	0.00	0.00	56.84	19245.46	56.84	19245.46	
99	KSRB 4-6.10 : Providing and removing centering, shuttering, strutting, propping etc., for chajjas, corbels etc., including edges including cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 Page No. 16 / Item No. 4.37 / PWD SR 2016-17	Sqm	5.40	312.01	0.00	0.00	2.70	842.43	2.70	842.43	
100	KSRB 15.3.13 : Providing 12mm thick cement plaster in single coat with cement mortar 1:3, to ceiling including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. Page No. 114 / Item No. 15.21 / PWD SR -2016-17	Sqm	38.54	223.03	0.00	0.00	16.50	3680.00	16.50	3680.00	
101	KSRB 15.3.11 :Providing 20mm thick cement plaster in single coat with cement mortar 1:4, to stone masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. Page No. 114 / Item No. 15.19 / PWD SR 2016-17 (Inside wall)	Sqm	88.24	270.41	0.00	0.00	41.16	11130.08	41.16	11130.08	
102	KSRB 15-7 : Providing lime rendering for plastering to wall and ceiling, including cost of materials, labour, curing complete as per specifications. (P. 115 / I. 15.33 PWD SR - 2016-17).	Sqm	126.78	28.89	0.00	0.00	57.66	1665.80	57.66	1665.80	
103	KSRB 15.3.9: Providing 18mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications Page No. 114 / Item No. 15.17 / PWD SR 2016-17 (Out side Wall)	Sqm	115.12	228.81	0.00	0.00	62.52	14305.20	62.52	14305.20	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
104	KSRB 15-14.1 : Providing and applying two coats with oil bound washable distemper of approved brand and shade on wall surface including priming coat with distemper primer after thoroughly brooming the surface free from mortar drops and other foregin matter including preparing the surface even and sand paper smooth, cost of materials, labours, complete as per specifications PWD SR 2016-17 (P.117 /I. 15.49.1)	Sqm	215.02	82.05	0.00	0.00	80.16	6577.13	80.16	6577.13	
105	KSRB 15-16.1: providing and finishing external walls in tow coats with water proof cement paint of approve brand and shade to give an even shade after thourghly brooming the surface to remove all dirt and losse powdered material, free from mortar dops and other foreign matter cost of materials, labours, complete as per specifications PWD SR 2016-17 (P. 118 / I. 15.53.2) with Primer	Sqm	115.12	97.07	0.00	0.00	62.52	6068.82	62.52	6068.82	
106	KSRB 15-18.2 : Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications. Page No. 121 / Item No. 15.74 / PWD SR 2016-17	Sqm	70.11	94.76	0.00	0.00	19.44	1842.13	19.44	1842.13	
107	Providing and fixing Special make glazed Vitrified tiles (Granomite finis) of approved make, quality and colour of sized 6000x600x10mm thick fixed on existing flooring wit ha special roffe adhesive for flooring and skirting etc., complete including providing spears at required interval and removing stains etc., complete. Page No. 107 / Item No. 14.43 / PWD SR 2016-17	Sqm	82.19	1375.16	0.00	0.00	39.14	53823.76	39.14	53823.76	
108	Providing and laying/fixing cement base, precast pre polished cement concrete, designer tiles 25mm thick conforming to IS 1237 heavy duty tiles for flooring reads of steps of steps and landin, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of material,s including cutting, griding the edge ti half/ful rounf wherever requires labour, curing complete as per specification Page No. 109 / Item No. 14.62 / PWD SR 2016-17	Sqm	9.00	1253.83	0.00	0.00	0.00	0.00	0.00	0.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
109	KSRB 7.7 : Providing and fixing in position in cement concrete 1:3:6 steel glazed windows and ventilators side hung/top hung fully openable as per approved drawings using Z angles of 25x33x3mm, weighing 1.419Kg/m both for outer and inner frames and central mullion section of size 25x46x3mm weighing 2.28Kg/m duly providing T section 19x19x3mm weighing 0.839 kg/m for glazing of windows not more than 34 cms. c to c including providing and fixing 4mm thick reeded glass with teakwood beading of required size, all steel section should confirm to I.S. 7452:1990, 4nos, of holdfasts of approved size section should be cut to length welded and electrically grinded subdividing frames of unit shall be tenonned and revetted into the frames electrically. All the steel surface shall be thoroughly cleaned free of rust and painted with one coat of anti-corosive paint and finishing with two coats of ready mix paint of approved colour and make including cost of materials, fixtures, labour and HOM of machinery complete as per specifications. Specification NO. KBS 7.12.1 / 7.12.2 / 7.12.3 / 7.12 Page No. 32 / Item No. 7.7/ PWD SR 2015-16	Sqm	**2.16**	4079.27	0.00	**0.00**	1.44	5874.15	1.44	5874.15	
110	KSRB: 7.5 Providing and fixing pull and push type rolling shutters of approved make out of 18 guage, 75mm wide cold rolled steel laths of convex corrugation, with side guides and bottom rail, with interlocking arrangements for steel laths by means of alternate clips, suspension shaft with High tension coil type springs two numbers, mounted on specially designed pipe shaft, with bracket plates, guide channels, ball bearing arrangements, for inside & outside locking with push & operations complete Including pulling hooks, 4nos handles wit hall fittings and accessories, painted with a coat of red lead paint (without top cover) cost of materials, labour, HOM of machinery complete as per specifications. Shutter size 3mx2.8m Specification NO. KBS 7.10 / 7.12 Page No. 31 / Item No. 7.5/ PWD SR 2015-16	Sqm	**15.00**	3307.33	0.00	**0.00**	3.60	11906.39	3.60	11906.39	
111	Providing revsrse osmosis system to cover 2000 Liters of High TDS water per hour with RAW WATER PUMP, SAND MEDIA FILTER, ACTIVATE CARBON FILTER, DOSING SYSTEM, MICRON FILTER, HIGH PRESSURE PUMP, RO membrane housing., RO MEMBRANES, RO CLEANSING SYSTEM, ELECTRICAL PANEL, INSTRUMENTATION, PH DOSING SYSTEM	Nos	**2.00**	551050.00	0.00	**0.00**	0.00	0.00	0.00	0.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
112	Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2 X1.5Sq.mm Cable confirming to the GTP, with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet / gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. GROUP A (Page No. 05, Item No.2.1 KPWD SR 2014-15 - b) Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch	Point	4.00	262.15	0.00	0.00	2.00	524.30	2.00	524.30	
113	Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2 X1.5Sq.mm Cable confirming to the GTP, with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet / gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. GROUP A (Page No. 05, Item No.2.1 KPWD SR 2014-15 - c) Long point above 6Mtr upto 10Mtr from tapping point to out let via switch	Point	4.00	388.41	0.00	0.00	2.00	776.82	2.00	776.82	
114	Supplying and flush mounting teak wooden box without front plank, made of not less than 12mm thick wood, after due groove cutting, Finishing with necessary cement plastering complete (Page No. 03, Item No. 1.6) KPWD SR 2014-15 - (1.6.5) 4"x4"x3" (101x101x76mm)	Each	24.00	72.76	0.00	0.00	12.00	873.12	12.00	873.12	
115	Supplying and flush mounting teak wooden box without front plank, made of not less than 12mm thick wood, after due groove cutting, Finishing with necessary cement plastering complete (Page No. 03, Item No. 1.6) KPWD SR 2014-15 - (1.6.1) 12"x12"x3" (300x300x76mm)	Each	12.00	124.12	0.00	0.00	6.00	744.72	6.00	744.72	
116	Supplying and flush mounting teak wooden box without front plank, made of not less than 12mm thick wood, after due groove cutting, Finishing with necessary cement plastering complete (Page No. 03, Item No. 1.6) KPWD SR 2014-15 - (1.6.3)10"x7"x3" (254x178x76mm)	Each	12.00	93.09	0.00	0.00	6.00	558.54	6.00	558.54	
117	Supplying 4mm thick plastic sheet with necessary nitches for fixing switches, regulators etc., and fixing on existing wooden or metal box using N.F. screws. (Page No. 17, Item No. 3.9) KPWD SR 2014-15	Sqcm	13333.32	0.27	0.00	0.00	6600.00	1782.00	6600.00	1782.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
118	Extra for Groove cutting in brick wall/CC floor to the suitable depth for concealing of Conduit/GI pipe and plastering, finishing upto wall surface complete. upto 50mm conduit in brick wall (Page No. 03, Item No.1.7.1) KPWD SR 2014-15	Mtr	**20.00**	22.47	0.00	0.00	10.00	224.70	10.00	224.70	
119	Supplying heavy gauge PVC Conduit Pipe 19/20 mm dia 2 mm thick with suitable size bends, metal junction boxes adhesive paste etc., by groove cutting in the wall and fixing by bracing U or J hooks and cement plastering up to the wall surface and run with 18 SWG GI fish wire run throughout the conduit wherever necessary. (Page No. 02, Item No. 1.3.1) KPWD SR 2014-15	Mtr	**20.00**	59.92	0.00	0.00	10.00	599.20	10.00	599.20	
120	Supplying and fixing PBBC/Bakelite straight or slant batten holder and wiring with 60w/230 volts lamps. (Page No. 20, Item No. 4.2) KPWD SR 2014-15	Each	**4.00**	94.16	0.00	0.00	2.00	188.32	2.00	188.32	
121	Supplying patti type fluorescent tube light fitting of 2' - suitable for 14 watts fluorescent tube fitting, made out of M.S. Sheet and stove enameled with HF Electronic Ballast , locking type brass contact holders mounted on double fold type sheet base fully wired for use on 230 volts AC . Supply including T5 lamp. (Page No. 20, Item No. 4.5) KPWD SR 2014-15	Each	**8.00**	632.37	0.00	0.00	2.00	1264.74	2.00	1264.74	
122	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A 1.5 sqmm (Page No. 06, Item No. 2.5.2) KPWD SR 2014-15	Mtr	**10.00**	19.90	0.00	0.00	5.00	99.50	5.00	99.50	
123	Supplying and fixing cast Aluminum round or oblong type bulk head fitting with GI wire guard, glass cover with 60/100 watts 230V GLS lamp. (Page No. 20, Item No. 4.3) KPWD SR 2014-15	Each	**8.00**	799.29	0.00	0.00	4.00	3197.16	4.00	3197.16	
124	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia (Page No. 55, Item No. 7.1) KPWD SR 2014-15	No	**2.00**	2917.89	0.00	0.00	1.00	2917.89	1.00	2917.89	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
125	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & FixtureEfficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part II.LED Streetlight 65watts	Each	**120.00**	20030.40	0.00	0.00	0.00	0.00	0.00	0.00	
126	Supplying and Fixing of.....mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires. Using 32mm dia G.I.pipe	Each	**182.00**	955.51	0.00	0.00	0.00	0.00	0.00	0.00	
127	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded Aluminium unsheathed wire single core/multi core cable in open or consealed system of wiring. a)4 sqmm.	Each	**600.00**	8.03	0.00	0.00	0.00	0.00	0.00	0.00	
128	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A.3.5 core 25 sqmm	Per Mtr	**200.00**	177.19	0.00	0.00	0.00	0.00	0.00	0.00	
129	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct.25 sqmm to 75 sqmm	Per Mtr	**200.00**	37.24	0.00	0.00	0.00	0.00	0.00	0.00	

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
130	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components.	Each	30.00	55105.00	0.00	0.00	0.00	0.00	0.00	0.00	
131	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes25 sqmm Long Barrel	Each	72.00	22.03	0.00	0.00	0.00	0.00	0.00	0.00	
						5,26,75,459.00		1,91,91,292.55		7,18,66,747.98	
				Amount in Words:	Rupees One Crore Ninety One Lakh Ninety One Thousand Two Hundred Ninety Two and Paise Fifty Five Only						

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Certificate:

1 Certified that the contractor has done the work satisfactorly
2 Certified that the debris has been removed from the site
3 Certified that the No dues from the contractor
4 Certified that the above item of the work were not claimed in any other bill

TEJUS CONSULTANTS

Consultants

Assistant Engineer

Assistant Executive Engineer

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore